

Application No.: 10/603,646

Office Action Dated: June 19, 2006

Response to Office Action Dated: August 29, 2006

**In the Claims:**

1. (Previously Presented) A method for demagnetizing objects between two coils lying on opposite longitudinal sides of a transport path relative to one another, wherein the object is located within the region between the two coils within an alternating field for a staying time of a certain duration, and wherein the coils form a single series oscillation circuit which are supplied in a current controlled manner, and wherein the object is previously treated at at least one pre-treatment station for demagnetizing magnetically hard locations in the object.
2. (Original) A method according to claim 1, wherein the staying time over the duration of the cycle lasts between 20 and 500 periods.
3. (Currently Amended) A method according to claim 1, wherein two coils are ~~grouped together into~~ connected in series to in effect form one single common coil, and wherein the alternating field is produced within the coil.
4. (Original) A method according to claim 2, wherein the alternating field of the series oscillation circuit is reduced down from a nominal current to an end current by way of a control or a ramp function which are programmed in the inverter.
5. (Canceled)
6. (Previously Presented) A method according to claim 4, wherein the demagnetization curve is influenced by additional supply of the series oscillation circuit by way of feeding with rectangular impulses by the separate current control.

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7. (Currently Amended) A method according to claim 4, wherein after completion of the demagnetization procedure, the series oscillation circuit is made ~~voltageless, currentless and chargeless to exhibit zero voltage difference across the circuit, zero current and zero charge by way of a zero-point correction.~~

8. (Canceled)

9. (Currently Amended) A device for demagnetizing objects with a demagnetization station which comprises two coils which are present and which are arranged on opposite longitudinal sides of a transport belt relative to one another, wherein the two coils are coreless and are connected in a single common series oscillation circuit and supplied by way of a current control for producing an alternating field, wherein the series oscillation circuit and the transport belt are operated in a cycled manner so that an object transported on the transport belt remains within an alternating field between the coils of the series oscillation circuit for a certain staying time, and wherein in the a transport direction of the transport belt there is present at least one pre-treatment station for demagnetizing magnetically hard locations in the object.

10. (Currently Amended) A device according to claim 9, wherein the two coils are ~~grouped together into~~ connected in series to in effect form a single common coil, and wherein the alternating field is produced in the inside of the common coil.

11. (Canceled)

12. (Currently Amended) A device according to claim 9, wherein the transport of the objects on the transport belt is ~~effected~~ affected in a cycled one of a start-stop and quick-slow cycled manner.

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13. (Currently Amended) A device according to claim 12, wherein the transport of the objects on the transport belt ~~effected~~affected in a cycled manner is performed in a ~~start-stop~~start and restart way.

14. (Canceled)